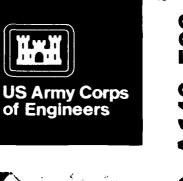


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RECREATION RESEARCH PROGRAM

MISCELLANEOUS PAPER R-83-2

SUMMARY OF THE 1982 CAMPGROUND RECEIPT STUDY

by

Gregory L. Curtis

U. S. Army Engineer Waterways Experiment Station P. O. Box 631, Vicksburg, Miss. 39180



December 1983 Final Report

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Prepared for Office, Chief of Engineers, U. S. Army Washington, D. C. 20314

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collected CRS data to examine trends in visitor characteristics. The data collected include visitor characteristics (e.g length of stay and group size), vehicle type, and camping and other recreation equipment (e.g. power boats and bicycles) used by fee campers. The CRS data are collected at 15 Corps lakes throughout the country. During 1982, a total of 149,576 CRS fee receipts were collected at the 67 fee campgrounds located at these lakes.

The CRS data presented here represent the best available nationwide sample of descriptive characteristics of visitors to Corps fee campgrounds. The resulting data base could be used effectively at all levels within the Corps to examine current use patterns and to monitor and evaluate changes in visitor characteristics if collected over a representative time period.

Several practical applications of the data base demonstrate the types of information that can be extracted: evaluation of the use of electric hookups; determination of market areas of projects and/or recreation areas by using a FORTRAN program developed to identify county of origin of visitors to an area; estimation of volume of fee receipts issued; determination of use of campsites, recreation areas, and projects; and comparison of increases in user fees with area visitation and occupancy rates.

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PREFACE

This report summarizes the results of the 1982 (calendar year) Camp-ground Receipt Study. This was the second complete year of data collection in this program of monitoring trends in visitor characteristics and use patterns at Corps of Engineers fee campgrounds.

The author of this report was Mr. Gregory L. Curtis, Environmental Laboratory (EL), U. S. Army Engineer Waterways Experiment Station (WES), Vicksburg, Miss. Mr. Curtis was on temporary assignment under the terms of an Intergovernmental Personnel Act agreement between WES and Michigan State University, East Lansing, Mich.

During the conduct of this study, Mr. William J. Hansen was Chief, Resource Analysis Group. Dr. Adolph J. Anderson, EL, was Manager of the Recreation Research Program. The study was under the supervision of Dr. Conrad J. Kirby, Chief, Environmental Resources Division, and the general supervision of Dr. John Harrison, Chief, EL. Ms. Nancy Tessaro, DAEN-CWO-R, was Technical Monitor.

COL Tilford C. Creel, CE, was the Commander and Director of WES during this study. Mr. F. R. Brown was the Technical Director.

This report should be cited as follows:

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SUMMARY OF THE 1982 CAMPGROUND RECEIPT STUDY

PART I: INTRODUCTION

Purpose

1. This report summarizes the results of data collected during the 1982 fee season for the Campground Receipt Study (CRS), and represents the second full year of data collection at all fee areas within the CRS. Therefore, a comparison is possible between the 1981 and the 1982 fee seasons. The calendar year (CY) 1981 data used in this report are described in detail in Curtis and Hansen (1982).* Additional information on the purpose and development of the CRS is provided in Curtis et al. (1982).**

Background

2. During the CY 82 fee season, ENG Form 4457 (TEST) dated Feb 82 was used to collect the CRS data (Figure 1). These forms were used to register fee campers at the Corps' 15 Recreation Research and Demonstration System (RRDS) Projects with fee campgrounds (Figure 2). Except for Nolin River Lake,† the data described in this report represent a complete census of fee receipts at these projects. A total of 149,576 fee receipts were collected at the 67 fee campgrounds located at the RRDS projects. The number of CRS campgrounds has dropped by five between CY 81 and CY 82.

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3. As in prior years, the CRS data were keypunched from a copy of the fee receipt by the appropriate District Offices. The keypunched data were then transmitted to the U.S. Army Engineer Waterways Experiment Station (WES) for analyses. The Recreation Analysis Program (RAP)†† was used to tabulate the

^{*} Curtis, G. L., and Hansen, W. J. 1982. "Summary of the 1981 Campground Receipt Study," Miscellaneous Paper R-82-3, U.S. Army Engineer Waterways Experiment Station, CE, Vicksburg, Miss.

^{**} Curtis, G. L., et al. 1982. "Development and Evaluation of the Campground Receipt Study," Miscellaneous Paper R-82-2, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

[†] A total of 3245 fee receipts were obtained from Nolin River, whereas the project issued approximately 4400 receipts. The missing data will be recovered and saved for future use but were not available for this report.

^{††} A FORTRAN Program that was developed at WES for the CRS. Copies of the program were also provided to the participating Districts so they could summarize their data.

U. S. ARMY CORPS USER PE		/h ~			SAMPLE		
DISTRICT PROJECT RE	AREA SIT	E NUMBER	RENEWAL	C	AR LICENSE	ZIP COD	Œ
1 2 3 4 5 6 7 0	9 10 11	12 13 14	Y 15	STATE	NUMBER	16 17 18	19 20
NAME OF CAMPER	NUMBER	PRIOR	PRIMARY		STARTING DATE	ENDING	DATE
(OPTIONAL)	IN PARTY	VISITS	DESTINATIO	» L	MO DAY YE	NO MO	DAY
	21 22	Y 23	Y 24	2	5 26 27 28	29 30 1	31 32
VEHICLE(S)	CAMPING EQUIPMENT RECREATIONAL EQUIPMENT						
33 CAR	"□	TENT		45	POWERBOA	NT	
34 TRUCK	40 🗆	POP-UP TR	AILER	46	TAOBILAZ		
95 🔲 VAN	4 🗀	PICKUP CA	MPER	47	☐ BICYCLE		
36 ☐ MOTORHOME	" C	TRAVEL TE	AILER	48	MOTORCY(
37 MOTORCYCLE	•• 🗆	NONE		49		MOTORCYCL	E)
38 OTHER	1			50			
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	Y E	LECTRIC HO	OKUP	52	OTHER		
1. GOLDEN AGE NO.	N	GHTS PD.	TOTAL FEE	PAID	ATTE	NDANT	
2. GOLDEN ACCESS NO.	53	54 55	56 57 50	59			

Figure 1. User Permit, ENG Form 4457 (TEST), Feb 1982

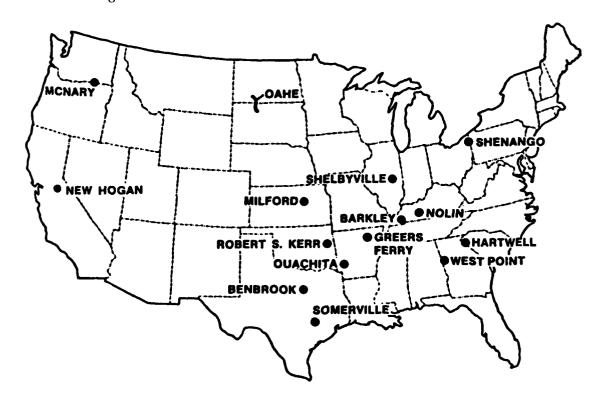


Figure 2. Campground Receipt Study project locations

CRS data. Two types of tabulation are generated by RAP: (a) an "Area Report," which analyzes all the CRS variables for each recreation area within a given project (Appendix A); and (b) a "Site Specific Data Report," which analyzes the same variables within each recreation area but does so by campsite (Appendix B). The descriptive statistics included herein are based on these tabulations.

PART II: DATA ANALYSES

Data Summary

- 4. Data from CY 82 are summarized in the following paragraphs for each of the projects in the CRS as well as for the entire sample. Comparisons can be made between projects, as well as comparisons between the individual projects and the total sample.
- 5. A summary of the CY 82 User Permits is shown in Table 1. The total number of camping groups involved in the CRS during CY 82 was 114,545. This represents 76.6 percent of the number of permits issued with 23.4 percent of the permits being renewals. The range of renewal receipts was 5.4 to 46.2 percent for individual projects.
- 6. General user characteristics (mean length of stay, mean group size, percentage of prior visits, percentage of primary destination, and percentage of Golden Age/Access* Passports) are presented in Table 2. The mean length of stay per group for the CRS total was 2.58 days with a range of 1.85 to 3.71 for individual projects. Similarly, the mean group size for the CRS total was 3.58 persons with a range of 2.90 to 4.05 persons at individual projects. Similar comparisons can be made for the other elements in Table 2.
- 7. The distribution of vehicle types used by groups is presented in Table 3. These percentages represent the percent of camping groups which had a particular vehicle type (i.e., one or more of a particular vehicle type was present with that group). Since a group may have more than one vehicle type with them, the percentages in Table 3 may exceed 100 percent for the individual projects as well as for the CRS totals. Overall, cars and trucks are approximately equal and the most frequent vehicle types (41.6 and 44.6 percent, respectively). However, the percent of these two types varies greatly between projects. Cars ranged from 26.4 to 56.5 percent and trucks from 35.4 to 70.0 percent. In addition, vans represented 10.9 percent overall with a range of 7.7 to 16.7. Motorhomes were present in 13.3 percent of the CRS sample with 6.0 percent the lowest and 26.1 percent the highest for the individual projects.

o pes of passports are available: those for persons over the age of (Golden Age) and those for handicapped persons (Golden Access). These passports allow a 50-percent discount on use fees.

- 8. A similar presentation is given in Table 4 for the camping equipment and power boats used. As with vehicle types, the sum of camping equipment percentages may exceed 100 percent.
- 9. Tents (40.3 percent) were the most frequently used type of camping equipment, exceeding the next highest, travel trailers (23.4 percent), by nearly twofold. The percentage of tents at a specific project ranged from 18.6 to 60.8 percent. In contrast, pop-up campers (9.4 percent overall) never exceeded 16.5 percent. Travel trailers ranged from 6.9 to 41.0 percent. Pickup campers were 12.9 percent for the total CRS and ranged from 8.0 to 23.7 percent.
- 10. The preceding data summaries included the total CRS sample and the overall percentages for each individual project. A tabulation of the CY 82 data for each recreation area and project within the CRS is provided in Appendix C. This appendix includes the information presented in Tables 1-4 as well as other recreational equipment not summarized in this section because of the relatively low percentages they represent (i.e. sailboats, bicycles, motorcycles, and off-road vehicles (ORVs).

Total CRS Trends

- 11. One of the primary reasons for initiating the CRS was to develop a valid and reliable data base to monitor visitor trends. The summaries presented herein compare the current CRS data with data from the past 2 years. The CY 81 and CY 82 data represent a census of the fee receipts collected at the 15 CRS projects while the CY 80 data are only a sample. One other difference in the CY 80 data is that only the primary vehicle was checked (i.e., the major vehicle was indicated and all others were ignored). In CY 81 and CY 82 all vehicle types present were recorded and percentages by type would therefore be expected to be slightly higher than they were in CY 80.
- 12. Figure 3 illustrates the distribution of vehicle types over the 3 years. The equipment used at CRS projects is shown in Figure 4.
- 13. From Figure 3 it appears that the percentage of all vehicle types has increased each year. Part of the increase between CY 80 and the subsequent years can be explained by the change in data collection noted above. This does not, however, explain the increases between CY 81 and CY 82. It could have resulted from increased accuracy in recording resulting from an

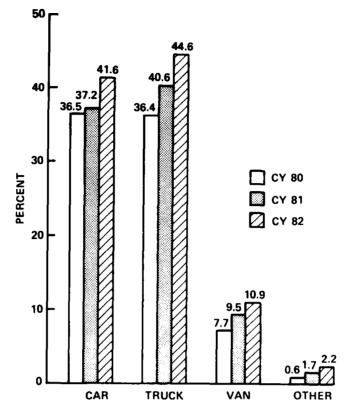


Figure 3. Distribution of vehicle types for the total CRS (CY 80-CY 82)

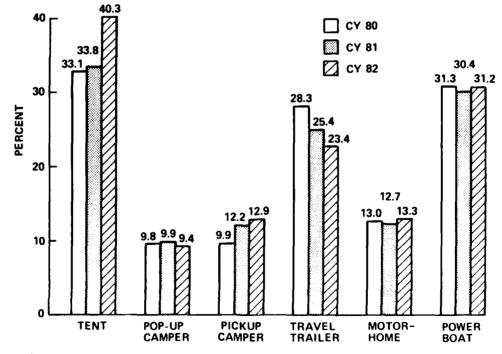


Figure 4. Distribution of equipment use for the total CRS (CY 80-CY 82)

increased familiarity with the form or it may be that campers have taken more vehicles, on the average, than they did the year before. This could be part of expected variation from year to year or it could reflect a trend in visitor behavior. As future CRS data are collected, a more accurate evaluation can be made of this change.

14. The frequency of equipment used at the CRS projects (Figure 4) does not show the steady increases as seen in the vehicle types. In fact, three categories (pop-up camper, motorhome, and power boat) have remained relatively constant over the 3 years and one category (travel trailer) has shown a decrease in its percent distribution. Only tents and pickup campers have shown increases for the 3 years. The most interesting features to note on Figure 4 are the dramatic increase in the percentage of groups with tents during CY 82 and the steady decrease in the percent of groups with travel trailers. If these trends hold, they will have very important management implications for the Corps in the design and upgrading of camping facilities.

CRS Project Trends

- 15. The above trends describe what is occurring within the entire CRS (i.e., trends on a nationwide basis). It is also important to examine the trends at the project level. In this section, a comparison is shown for all 15 CRS projects between CY 81 and CY 82.
- 16. In Figure 5, the mean number of people in the camping party are presented. The largest net change occurred at New Hogan Lake (a decline from 3.70 to 3.10). Overall, the variations at individual projects have not resulted in any major shifts in camping party characteristics. In viewing the mean length of stay (Figure 6), there does appear to be a substantial increase for nearly all projects. This may reflect improvement between CY 81 and CY 82 in accounting for renewals (Curtis and Hansen 1982) and may therefore reflect a more accurate measure of the average length of stay than an actual change in visitor behavior.
- 17. The percentages of receipts with Golden Age/Access passports (Figure 7) show a rise for all but one project between these 2 years. The decrease at Hartwell Lake represents a decline of nearly one third (from 28.4 to 19.5 percent). During CY 81 Hartwell Lake experienced extremely low water levels which resulted in reduced visitation. With water levels back to normal

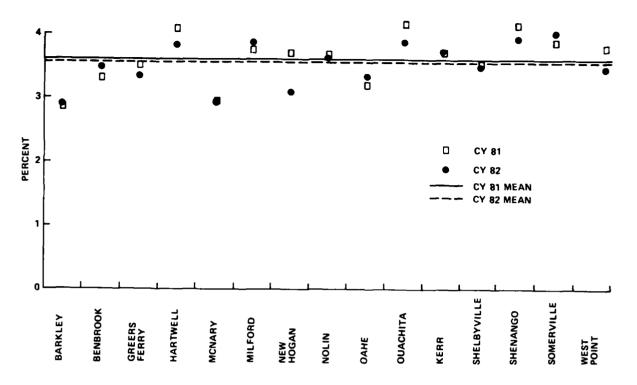


Figure 5. Mean number of people in the camping party by CRS project (CY 81-CY 82)

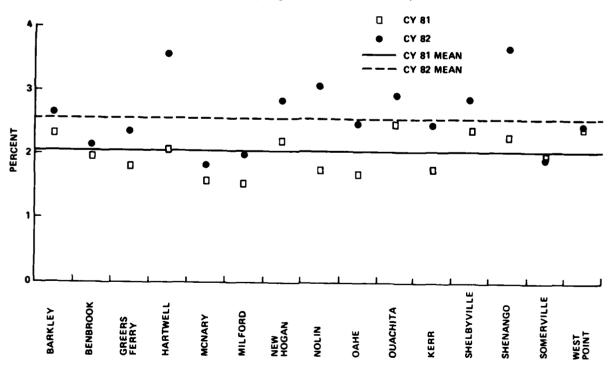


Figure 6. Mean length of stay (days) for the camping party by CRS project (CY 81-CY 82)

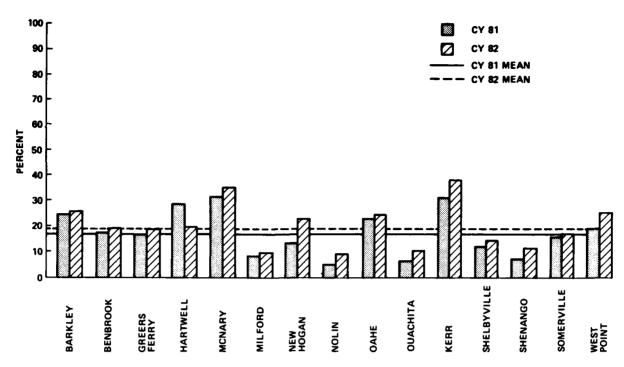


Figure 7. Percentage of receipts purchased with a Golden Age/Access passport by CRS project (CY 81-CY 82)

during CY 82, visitation also increased. It is possible that more active water participants were returning to the lake. This would probably mean a younger visitor population with a higher proportion of non-golden passport visitors. This is also reflected with the increase in the percentage of groups with power boats (see Figure 18, page 18).

18. Figures 8 and 9 present, respectively, the percent of campers which had prior visits to the project and the percent of campers with the project as their primary destination. Both of these figures show all but two projects dropping in their percentages from CY 81 to CY 82. The CRS mean totals dropped from 80.0 to 71.4 percent for prior visits and from 89.6 to 79.5 percent for primary destination. This decrease, at least in part, can be explained by a procedural change in the fee receipt form itself. During CY 81, a "yes" and "no" box was provided for both of these categories. Therefore, any missing answers could be excluded from the calculations. A change made to the user permit eliminated the "no" box on the CY 82 form, thereby removing the opportunity to exclude the missing answers. Those that are missing on the CY 82 forms are contributing to the total number of negative responses and would result in a lower overall estimate. A true drop in these categories may exist, but the form modification made it impossible to be certain. Future CRS data

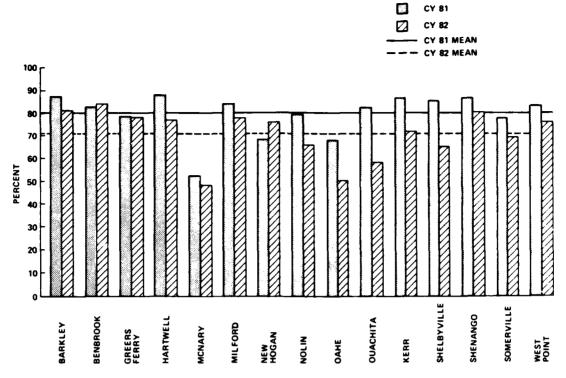


Figure 8. Percent of camping parties with prior visits to the CRS project (CY 81-CY 82)

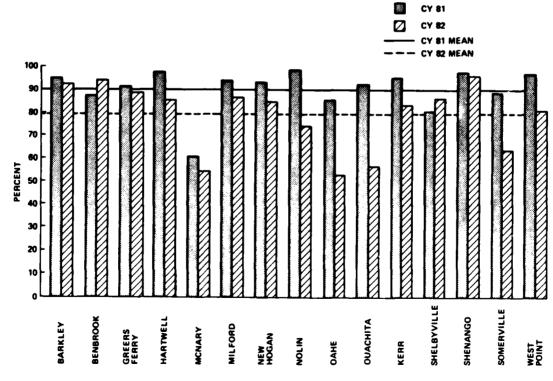


Figure 9. Percent of camping parties with the CRS project as their primary destination (CY 81-CY 82)

will enable an evaluation to be made of these two categories.

- 19. The percentage of camping groups with cars, trucks, and vans can be seen in Figures 10-12, respectively. Keeping in mind the discussion in the previous section about the overall increase in all vehicle types, it is not surprising to find most project totals increasing over the 2-year period. For cars, only New Hogan and Ouachita have decreased with Kerr remaining the same. The truck category has three projects with decreasing percentages: McNary, Nolin, and West Point. Two projects, Milford and Kerr, show a slight decrease in the van category.
- 20. The percentages of camping equipment types brought to each project are shown in Figures 13-17. All projects show an increase in tents (Figure 13) brought by camping parties with the largest increases at Benbrook and New Hogan. Pop-up campers (Figure 14), in most cases, have stayed about the same with a mixture of small increases for some projects and small decreases for others. The exception to this was West Point where a decrease of 8.0 percent was noted. Figure 15 shows an increase in the percent of pickup campers present at all but three projects: Kerr, Shenango, and Somerville. The largest increases are seen at McNary and Nolin. In contrast, travel trailers (Figure 16) reveal a decrease for many projects. The only substantial increase occurred at New Hogan (from 13.5 percent to 24.6 percent) between the 2 years. Motorhomes (Figure 17) appear to have remained relatively constant between CY 81 and CY 82. Only moderate increases and decreases were seen, with the exception of New Hogan where an increase of 8.8 percent was noted.
- 21. Another way to examine the camping equipment is to compare types of equipment within a project. For example, compare the percentages of the five equipment types for New Hogan: all five categories have increased with tents, travel trailers, and motorhomes showing the largest increases within their own categories. Similar comparisons can be made for all the projects to determine the character of the camping equipment which is present and/or identify any noticeable change that may have occurred.
- 22. The project trends for power boats are presented in Figure 18 and show that two thirds of the CRS lakes had higher percentages in CY 82. The largest increases were noted at Nolin and Shelbyville. The largest net change, however, was a 13-percent drop at New Hogan. Overall, the percentage of power boats remained about the same between CY 81 and CY 82 for the CRS.
 - 23. A composite description can also be obtained from Figures 5-18 for

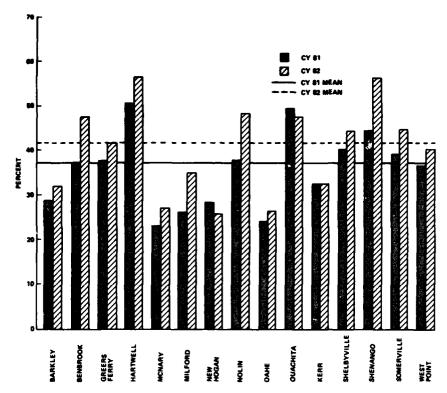


Figure 10. Percent of camping parties with cars by CRS project (CY 81-CY 82)

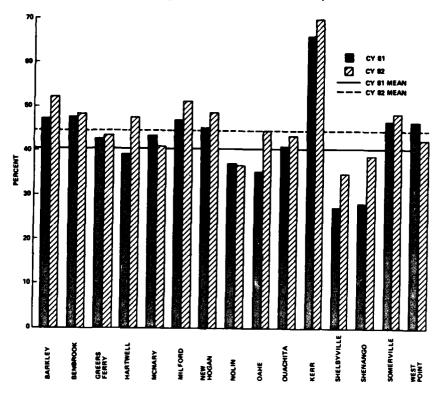


Figure 11. Percent of camping parties with trucks by CRS project (CY 81-CY 82)

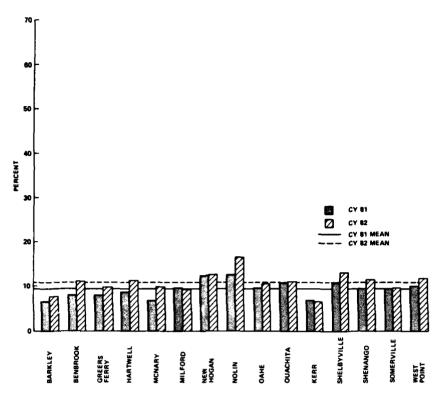


Figure 12. Percent of camping parties with vans by CRS project (CY 81-CY 82)

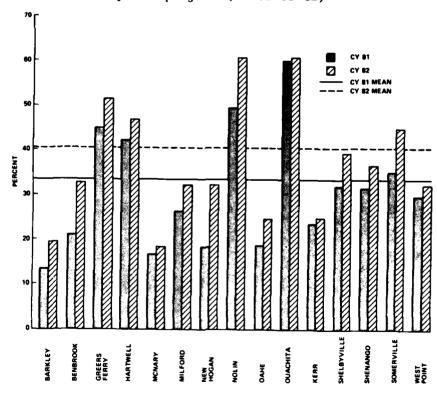


Figure 13. Percent of camping parties with tents by CRS project (CY 81-CY 82)

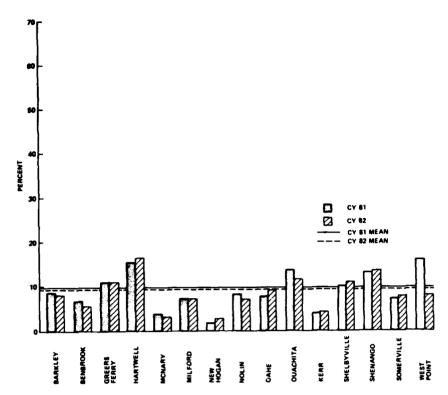


Figure 14. Percent of camping parties with pop-up campers by CRS project (CY 81-CY 82)

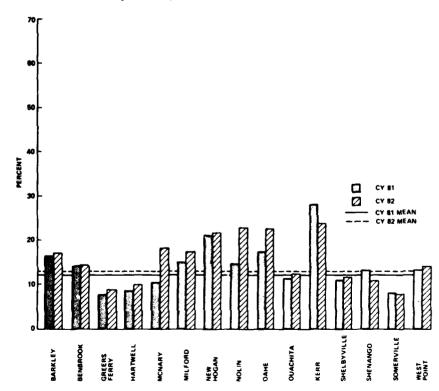


Figure 15. Percent of camping parties with pickup campers by CRS project (CY 81-CY 82)

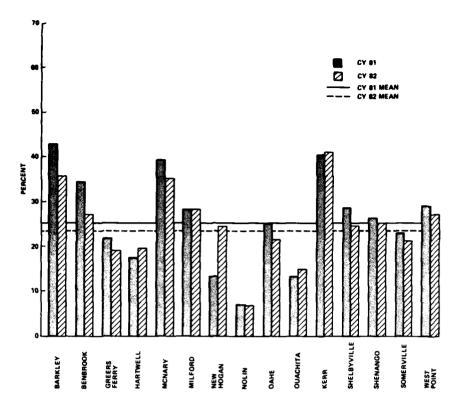


Figure 16. Percent of camping parties with travel trailers by CRS project (CY 81-CY 82)

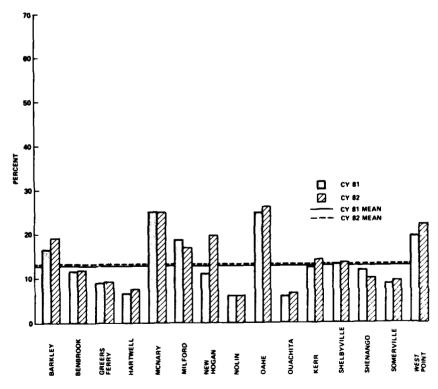


Figure 17. Percent of camping parties with motor omes by CRS project (CY 81-CY 82)

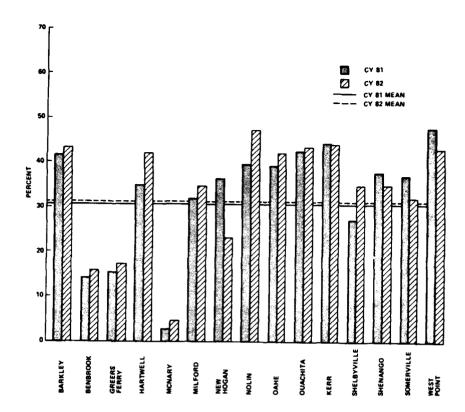


Figure 18. Percent of camping parties with power boats by CRS project (CY 81-CY 82)

a particular project in order to examine its overall trends. For example, a comparison can be made between CY 81 and CY 82 for several categories at McNary. During CY 81, McNary had the lowest mean length of stay (1.55 days), prior visits (52.6 percent), and primary destination (61.9 percent) of all the CRS projects. It also had the second lowest mean number in party (2.92 persons) and the highest percent of Golden Age passports (31.5 percent). For camping equipment, McNary had the highest percent for motorhomes (25.6 percent), the third highest percent for travel trailers (39.4 percent), and the second lowest for tents (16.6 percent). Power boats (2.6 percent) were by far the lowest at McNary of all the projects.

24. The same categories for CY 82 at McNary are nearly identical to the previous year. The length of stay (1.85 days) was the lowest of all projects with prior visits being 48.6 percent (lowest) and primary destination at 54.6 percent (second lowest). Again in CY 82, the mean number in party was the lowest (2.94 persons) with a drop in rank of Golden Age passports (second highest) but an overall increase in the actual percentage (35.0 percent). Camping equipment remained relatively stable with motorhomes (25.2 percent)

at second highest, travel trailers (35.2 percent) at third highest, and tents (18.6 percent) the lowest of all projects. Power boats (4.4 percent) were by far the lowest of all the CRS lakes again in CY 82. From this description, no major changes have been detected in the character of the campground visitors at McNary. If changes in trends had been discovered, steps could be taken to determine what may have caused the changes. On the other hand, if there were major management modifications that occurred between the 2 years, it could be concluded that they had little effect on the characteristics of the campers visting McNary.

Special Field Applications

- 25. The CRS data base has many applications beyond its main purpose of identifying visitor use patterns and characteristics and examining how they change over time. Presented here are two additional applications which show how the CRS data base may be useful to managers and planners.

 Daily sales of user permits
- 26. Using the starting date of each permit, it is possible to estimate potential volume of sales (and, therefore, collection burden) on a given day of the week (or holiday) for each recreation area or project. The results of such an analysis are shown in Table 5 for Lake Oahe during the CY 82 recreation season. From this table it can be seen that on both Friday and Saturday permits are issued for nearly one third of all the campsites located on the lake. This means that nearly two thirds of all campsites must have new user permits issued during these 2 days. As expected, holiday weekends have the greatest volume of user permits issued. On each of the 3 days (Friday, Saturday, and Sunday), the project staff can expect to issue permits for 38.6 percent of all their campsites. During the three slowest days of the week (Monday, Tuesday, and Wednesday) the staff can anticipate collecting fees for about 20 percent of their campsites.
- 27. Noticeable variation occurs between the four recreation areas at the lake which should also be considered. For example, on Sunday the staff can expect to issue permits for approximately one quarter of their campsites. However, at Downstream South recreation area only 6.5 percent (or 2.85 permits) will be issued. Having this type of information could be very useful in managing project staff and supplying materials and support for gate attendants.

Comparison of user fees and visitation

- 28. Recently, there has been much interest in examining the effect increased user fees would have on Corps visitation. Table 6 presents a comparison of user fees and participation between CY 81 and CY 82 for all CRS recreation areas where fees were collected both years. This presentation is not meant to be an economic analysis of increasing user fees. It is only provided to give an overview of what has occurred within the CRS between the two years, keeping in mind the fees that were charged.
- 29. User fees increased at 13 of the 15 CRS projects between CY 81 and CY 82. The two projects that maintained constant fees for both years were Ouachita and Kerr. For the other projects, the amount of increase ranged from 25 to 50 percent. In reviewing Table 6, it appears the fees charged did not adversely affect visitation since occupancy rate and visitation seemed to vary between years without regard to fees charged. For example, occupancy rate and visitation both dropped at Kerr where fees remained the same. Likewise, at a number of projects where fees had increased the occupancy rate and visitation both increased (e.g. Benbrook, McNary, New Hogan, and Shenango). This brief analysis leads to the conclusion that other factors play a far more important role in affecting visitation at Corps projects than the present level of fees charged.

PART III: APPLICATIONS OF DATA BASE

- 30. With the completion of the CY 82 fee season, 3 years of CRS data have been collected at the 15 RRDS projects. These data provide the Corps with a unique data base founded on a representative sample of Crops projects. This data base can furnish information that can be used effectively at all levels within the Corps to examine current use patterns and to monitor trends and evaluate changes in visitor characteristics.
- 31. Several practical applications of this data base to date demonstrate the types of information that can be provided beyond the monitoring of trends and assisting in research. These include:
 - Evaluating the use of electric hookups. A detailed analysis of electricity use was requested by the Greers Ferry Lake staff to determine to what extent current hookups were being used. In addition, Louisville District staff used information provided in the CY 81 CRS summary report in evaluating the potential for increasing the number of electrical hookups at its projects.
 - b. Determining the market areas of projects and/or recreation areas. A FORTRAN program has been developed which analyzes the CRS data by county of origin for visitors to an area. This analysis can then be used for a variety of tasks such as recreation benefit calculation or identification of market areas. Specific information on market areas has been requested by Little Rock District. Lake Oahe staff have also used the CRS fee receipts to tally manually the county of origin for visitors to their recreation areas.
 - c. Estimating the volume of fee receipts issued. In this report an example was presented which estimated the number of permits sold during each day of the week. This could also be done on a weekly (e.g. second week of June), monthly (e.g. July), seasonal (e.g. spring), or yearly basis. The Lake Shelbyville staff requested their total CY 82 sales to help plan and prepare the visitor information brochures needed for the CY 83 fee season.
 - d. Determining the distribution of use at campsites, recreation areas, and projects. An example of this was presented in the CY 81 summary report for the use patterns of campsites at a recreation area.
 - e. Comparing increases in user fees with area visitation and occupancy rates. There is interest in what effect increased user fees have on the visitation to Corps campgrounds. An examination of this was presented in this report using the CRS data to determine the occupancy rates and visitation.

32. Many other potential applications of the CRS data exist and can be employed by all levels within the Corps. The availability and continued collection of trend data make more responsive management decisions possible.

Table 1
User Permit Summary

Project	Number of Permits	Number of Groups	Percent Renewal Receipts
		<u>oroups</u>	Renewal Receipes
Lake Barkley	7,937	6,526	17.8
Benbrook Lake	5,472	4,363	20.3
Greers Ferry Lake	32,054	23,600	26.4
Hartwell Lake	10,714	5,759	46.2
McNary L&D	4,729	3,695	21.9
Milford Lake	4,856	3,928	19.1
New Hogan Lake	7,456	5,921	20.6
Nolin River Lake	3,243	2,182	32.7
Lake Oahe	7,493	5,227	30.2
Lake Ouachita	9,259	7,044	23.9
R. S. Kerr L&D	2,603	1,845	29 1
Lake Shelbyville	20,496	15,809	22.9
Shenango River Lake	7,241	4,459	38.4
Somerville Lake	16,874	15,532	8.0
West Point Lake	9,149	8,655	5.4
RRDS Projects	149,576*	114,545	23.4

^{*} A total of 149,760 permits were submitted. This reduced number of permits resulted from keypunch errors which lead to the elimination of some data records (184 permits or 0.1 percent).

Table 2
General User Characteristics

Project	Recreation* Days	Mean Length of Stay days	Mean Number in Group	Percent Prior Visits	Percent Primary Destination	Percent Golden Age/Access Passport
Lake Barkley	50,102	2.69	2.90	81.1	92.6	25.9
Benbrook Lake	29,865	2.15	3.51	84.3	93.9	19.1
Greers Ferry Lake	195,364	2.37	3.35	77.7	88.3	18.4
Hartwell Lake	81,709	3.59	3.83	76.4	85.4	19.5
McNary L&D	20,352	1.85	2.94	48.6	54.6	35.0
Milford Lake	30,454	2.00	3.89	77.5	85.9	9.8
New Hogan Lake	52,269	2.85	3.10	75.6	84.4	22.5
Nolin River Lake	23,408	3.08	3.62	65.7	74.1	9.2
Lake Oahe	42,603	2.52	3.34	50.2	53.1	24.6
Lake Ouachita	87,978	2.96	3.88	58.5	56.4	10.6
R. S. Kerr L&D	16,514	2.49	3.78	72.1	83.2	38.0
Lake Shelbyville	160,545	2.90	3.51	65.3	85.9	14.3
Shenango River Lake	69,764	3.71	3.96	80.3	95.6	11.7
Somerville Lake	112,080	1.98	4.05	69.3	64.4	16.9
West Point Lake	71,830	2.48	3.50	75.6	81.3	25.8
RRDS Projects	1,044,837	2.58	3.58	71.4	79.5	18.7

^{*} The number of recreation days of use for each project is equal to the sum of the "number in group" times the "length of stay" for each fee receipt from that project. Any receipts which have the "length of stay" or "number in group" missing (zero) would have recorded zero recreation days. Therefore, this measure of recreation days may be low. The extent of this variation depends on the number of missing (zero) elements (missing values were never greater than 2.0 percent for these elements for the individual projects).

Table 3

Distribution of Vehicle Types (Percent)

Project	Car	Truck	Van	Motor- home	Other*
Lake Barkley	32.0	52.1			
•			7.7	19.2	1.2
Benbrook Lake	47.5	48.3	11.1	11.8	3.5
Greers Ferry Lake	41.8	43.5	9.9	9.2	2.9
Hartwell Lake	56.5	47.8	11.4	7.4	2.3
McNary L&D	27.2	40.9	10.0	25.2	1.6
Milford Lake	34.9	51.2	9.5	16.9	1.3
New Hogan Lake	25.9	48.7	12.8	19.8	0.5
Nolin River Lake	48.3	36.8	16.7	6.0	1.0
Lake Oahe	26.4	44.4	10.6	26.1	3.5
Lake Ouachita	47.8	43.7	11.3	6.8	2.6
R. S. Kerr L&D	32.3	70.0	6.7	14.2	1.4
Lake Shelbyville	44.3	35.4	13.2	13.7	3.1
Shenango River Lake	56.5	39.2	11.7	10.0	4.9
Somerville Lake	45.1	48.3	9.9	9.5	0.9
West Point Lake	40.5	42.9	12.0	22.3	0.4
RRDS Projects	41.6	44.6	10.9	13.3	2.2

^{*} The "Other" category includes any mode of transportation that is not listed.
This may include such things as motorcycle, bicycle, walking, seaplane, etc.

Table 4

Distribution of Camping Equipment (Percent)

Project	<u>Tent</u>	Pop-up Camper	Pickup Camper	Travel Trailer	Motor- home	Power Boat
Lake Barkley	19.7	8.1	17.3	35.8	19.2	43.4
Benbrook Lake	32.7	5.6	14.5	27.0	11.8	15.8
Greers Ferry Lake	51.5	11.0	8.9	19.0	9.2	17.1
Hartwell Lake	46.7	16.5	10.2	19.5	7.4	41.9
McNary L&D	18.6	3.1	18.6	35.2	25.2	4.4
Milford Lake	32.2	7.2	17.5	28.3	16.9	34.4
New Hogan Lake	32.1	2.8	21.7	24.6	19.8	23.2
Nolin River Lake	60.7	7.1	23.0	6.9	6.0	47.2
Lake Oahe	24.6	8.9	22.7	21.7	26.1	42.0
Lake Ouachita	60.8	11.7	12.6	15.1	6.8	43.7
R. S. Kerr L&D	25.1	4.3	23.7	41.0	14.2	44.0
Lake Shelbyville	39.7	11.2	11.8	25.0	13.7	35.0
Shenango River Lake	36.7	13.7	11.0	25.7	10.0	35.0
Somerville Lake	45.1	8.0	8.0	21.8	9.5	32.0
West Point Lake	32.3	8.0	14.2	27.5	22.3	43.3
RRDS Projects	40.3	9.4	12.9	23.4	13.3	31.2

Mean Number of User Permits (and Percent of Total Campsites) Sold by Day* for Lake Oahe, CY 82 Table 5

	Number								
Recreation Area	of Campsites	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Holiday
Downstream South	777	3.13 (7.1%)	2.60 (5.9%)	3.06 (7.0%)	5.13 (11.6%)	10.54 (24.0%)	10.92 (24.8%)	2.85 (6.5%)	18.22 (41.4%)
Downstream North	160	29.47 (18.4%)	30.87 (19.3%)	28.63 (17.9%)	35.13 (22.0%)	47.85 (29.9%)	(%9°0E)	33.85 (21.2%)	60.44
Indian Creek	32	11.73 (36.7%)	10.67 (33.3%)	12.00 (37.5%)	13.56 (42.4%)	16.00 (50.0%)	12.38 (38.7%)	13.15 (41.1%)	11.88
Indian Memorial	30	9.60	11.60 (38.7%)	10.56 (35.2%)	10.13	11.85	10.08	11.46 (38.2%)	12.22 (40.7%)
Totals	266	53.93 (20.3%)	55.74 (21.0%)	54.25 (20.4%)	63.95 (24.0%)	86.24 (32.4%)	82.38 (31.0%)	61.31 (23.0%)	102.76 (38.6%)

^{* 19} May 82 through 6 September 82.

Includes Friday, Saturday, and Sunday of holiday weekends. If a date was used here, it was excluded from the day of the week calculations.

Table 6
Comparison of CY 81 and CY 82 User Fees and Participation

Project/ Recreation	llser	Fee, \$	Occupano	v Rate	Visi	tation
Area	CY 81	CY 82	CY 81	CY 82	CY 81	CY 82
Barkley					-	
Canal	4.00	5.50	0.539	0.461	31,882	22,533
Hurricane Creek	4.00	5.50	0.526	0.864	16,464	25,634
Benbrook						
South Holiday*	4.00 & 3.00	6.00 & 4.00	0.323	0.384	12,811	15,307
Mustang*	4.00 & 1.00	6.00 & 3.00	0.302	0.541	7,628	14,558
Greers Ferry						
Dam Site	4.00	5.00	0.190	0.420	31,454	56,545
Old Hwy 25	3.00	4.00	0.163	0.301	11,534	15,084
Heber Springs	4.00	5.00	0.172	0.273	15,650	16,922
Cove Creek	2.00	3.00	0.121	0.202	4,923	6,001
Shiloh	3.00	4.00	0.090	0.164	6,892	8,337
Narrows	3.00	4.00	0.428	0.270	17,973	16,873
Devils Fork	3.00	4.00	0.235	0.375	8,420	9,073
Sugar Loaf	3.00	4.00	0.128	0.209	8,089	14,715
Van Buren	3.00	4.00	0.050	0.093	2,083	2,552
Choctaw	3.00	4.00	0.179	0.319	19,762	20,541
J. F. Kennedy	4.00	5.00	0.759	0.716	27,394	28,612
Hartwell						
Watsodlers*	4.00 & 5.00	5.00 & 6.00	0.187	0.263	12,372	15,675
Crescent	4.00	5.00	0.128	0.189	5,100	6,026
Springfield	4.00	5.00	0.114	0.162	7,008	9,280
Milltown	4.00	5.00	0.108	0.154	4,162	5,518
Paynes Creek**	3.00	5.00	0.034	0.085	1,515	3,821
Asbury	3.00	4.00	0.146	0.204	5,565	7,235
Oconee Point	4.00	5.00	0.173	0.335	10,565	17,950
Twin Lakes	4.00	5.00	0.327	0.423	10,884	14,371
		(Continued))			

^{*} These parks have two fee charges (i.e., some loops have a lower fee than the other loops).

^{**} Improvements were made to upgrade this park between CY 81 and CY 82.

(Sheet 1 of 3)

Table 6 (Continued)

Project/ Recreation	lice	r Fee, \$	Occupanc	y Rate	Vici	tation
Area	CY 81	CY 82	Occupano CY 81	CY 82	CY 81	CY 82
McNary						
Hood Park	4.00	6.00	0.407	0.462	18,511	20,352
Milford						
Curtis Creek	4.00	5.00	0.071	0.103	5,483	7,782
Farnum Creek	3.00	3.00	0.061	0.083	5,878	7,28
Rolling Hills	4.00	5.00	0.063	0.066	5,891	6,481
School Creek	3.00	3.00	0.055	0.075	2,396	3,404
Timber Creek	3.00	3.00	0.040	0.038	5,296	5,189
New Hogan						
Acorn	3.50	4.00	0.438	0.762	35,413	52,269
0ahe						
Downstream South	4.00	6.00	0.363	0.183	6,356	3,097
Downstream North	4.00	6.00	0.333	0.399	18,741	22,392
Indian Creek	4.00	6.00	0.764	0.814	9,000	9,469
Indian Memorial	4.00	6.00	0.577	0.723	6,511	7,645
Ouachita						
Denby Point	4.00	4.00	0.214	0.233	6,893	8,914
Tompkins Bend	4.00	4.00	0.327	0.378	11,919	21,525
Joplin	4.00	4.00	0.347	0.397	10,412	16,841
Crystal Springs	4.00	4.00	0.390	0.418	11,057	14,522
Brady Mountain	4.00	4.00	0.634	0.673	17,830	24,981
R. S. Kerr						
Applegate Cove	4.00	4.00	0.910	0.644	6,273	6,602
Short Mountain Cove	4.00	4.00	0.074	0.056	2,697	1,926
Cowlington Point	4.00	4.00	0.382	0.261	4,346	4,994
Gore Landing	3.00	3.00	0.546	0.348	2,135	1,814
Sallisaw Creek	4.00	4.00	0.073	0.045	1,448	1,093

(Continued)

(Sheet 2 of 3)

Table 6 (Concluded)

Project/ Recreation	liea	r Fee, \$	Occupano	y Rate	Vici	tation
Area	CY 81	CY 82	CY 81	CY 82	CY 81	CY 82
Shelbyville						
Coon Creek	4.00	6.00	0.433	0.431	65,074	61,551
Lone Point	4.00	6.00	0.203	0.272	4,860	6,405
Lithia Springs	4.00	6.00	0.621	0.520	45,733	49,909
"Bo" Wood	4.00	6.00	0.645	0.587	30,241	31,188
Whitley Creek	4.00	6.00	0.266	0.274	10,871	11,421
Shenango						
Shenango Recre- ation Area	4.00	6.00	0.231	0.291	50,923	69,764
Somerville						
Big Creek	3.00	5.00	0.120	0.109	9,129	9,169
Rocky Creek	4.00	6.00	0.170	0.244	33,140	49,229
Yegna Creek	4.00	6.00	0.240	0.496	26,465	38,472
West Point						
R. Schaefer Heard	4.00	5.00	0.112	0.229	10,564	14,338
Brush Creek	4.00	5.00	0.051	0.032	1,048	564
Holiday Park	4.00	5.00	0.070	0.105	23,486	30,089
State Line	4.00	5.00	0.065	0.091	6,332	7,758
Amity Park	4.00	5.00	0.187	0.174	20,777	18,863

APPENDIX A: EXAMPLE OF A RECREATION ANALYSIS PROGRAM (RAP) "AREA REPORT"

Definitions and descriptions of the abbreviations and terms used in a RAP "Area Report" are listed below:

NO. The total number (tally or count depending on the

category).

PCT. The percent of the total number (NO.) for any given

category.

MISSING Number of receipts on which no information was checked for

that category.

CAMPING PERMITS Total number of receipts collected for that area during

the study period.

CAMPING GROUPS The number of groups which visited the recreation area

(CAMPING PERMITS - RENEWALS).

CAMPING PARTICI-Sum of number of "people in group" from each receipt.

PANTS

PERSONS/GROUP, Average number of persons per group (party). Any permits AVG.

with zero "number in party" (i.e. the number in group was

not recorded) are excluded from this estimate.

NIGHTS PAID Sum of "length of stay" for each permit.

LENGTH OF STAY/ Average length of stay. Any permits with zero "nights GROUP, AVG.

paid" (i.e. "nights paid" was not recorded) are excluded

from this estimate.

TOTAL REC DAYS Total recreation days of use. A recreation day of use is OF USE

defined as a visit by an individual to a recreation area for any portion or all of a 24-hr period. The number of recreation days of use for each receipt is equal to the "number in group" times the "length of stay." These

products are summed for all receipts.

PRIOR VISITS

Indicates whether or not camping party had been at recreation area before. Only the YES responses are provided.

PRIMARY DESTINATION

Indicates whether or not this project is the primary destination of the camping party on this trip. Only the YES responses are provided.

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FROM 401 TO 929

PROJECT NO. 12390 REC AREA 40. 1

	GROUP TOTAL	TOTAL	VEHICLE TOTAL	FHICLE TOTAL		GROUP TOTAL	TOTAL	EQJIP. TOTAL	EQJIP. TOTAL		GROUP	SROUP TOTAL	EQUIP.	EQUIP. TOTAL
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	1509	25.9	1509	25.0	TENT	1471	32.1	14 71	31.5	POWERBOAT	1374	23.2	1374	6
	2837	48.7	2840	47.1	POP-UP TRAILER	130	2.8	130	2.8	SAILBOAT	16	0.3	16	1.0
	972	12.8	246	12.4	PICKUP CAMPER	995	21.7	395	21.4	BICYCLE	~	7.0	21	
Ŧ	908	15.5	905	15.6	TRAVEL TRAILER	1126	24.6	1126	24.2	MOTORCYCLE	6	0.	5	0.
MOTORCYCLE	18	0.3	85	0.3	MOTORHOME	908	19.8	305	19.5	ORV	~	0.0	~	1.0
	٥	0.2	٥		NONE	22	0.5	25	0.5	OTHER	14	0.2	14	1.0
	90				MISSING	1339								•

USER CHARACTERISTICS

CAMPING PERMITS	9572				YES
CAMPING GROUPS	5021	STAG STEEL	14877	20100	NO. PCT.
TAMBLE OF STATES			- 0	0-10 A 2014 T	
0 - 2 C L T J T L L L D Z T L L L C L	2000		(2.7	NOT INVIOUS AND LANGE	\ } •
'ERSONS/GROUP, AVG.	3.10	TOTAL REC DAYS OF USE	52269		
10. GOLDEN PASSPORTS	1578				
TOTAL FEES PAID	\$ 58558,00			ELECTRICAL HOOKUPS	
RENEUALS	1535				8
				NO. OF GROUPS	0
				NIGHTS PAID	0

NOTE 1: (O PERMITS SHOW ZERO FEE)
(8 PERMITS SHOW ZERO PERSONS IN PARTY)
(3 PERMITS SHOW ZERO NIGHTS PAID)
(0 PERMITS SHOW BOTH ZERO PERSONS, NIGHTS PAID)

ONE OR MORE OF THE SPECIFIED ITEMS. THE VEHICLE OR EQUIPMENT TOTALS ARE THE GROUP TOTAL NUMBER OF THE SPECIFED ITEMS RECORDED. FOR EXAMPLE. A GROUP WITH TWO CARS WOULD BE COUNTED ONCE UNDER THE GROUP TOTAL AND TAICE UNDER THE VEHICLE TOTAL FOR CARS. THE GROUP PERCENT IS NUMBER OF GROUPS THAT HAD ONE OR HORE OF THE SPECIFIED ITEMS DIVIDED BY THE TOTAL HUMBER OF GROUPS. THE COLUMN TOTAL MAY EXCEED 100 PERCENT SINCE GROUPS MAY HAVE HORE THAN ONE TYPE OF VEHICLE OR EQUIPMENT. VEHICLE AND EQUIPMENT PERCENTS ARE THE TOTAL FOR EACH ITEM DIVIDED BY THE COLUMN TOTAL AND SHOULD EQUAL 100 PERCENT FOR ROUNDING). THE AVERAGE (AVS.) COLUMN UNDER RECREATIONAL EQUIPMENT IS THE TOTAL NUMBER OF EACH ITEM RECORDED DIVIDED BY THE NUMBER OF GROUPS THAT MAD ONE OR MORE OF THAT ITEM WITH THEM. CATEGORIES THE GROUP TOTAL IS THE NUMBER OF GROUPS THAT HAD VEHICLE AND CAMPING AND RECREATIONAL EQUIPMENT FOR NOTE 2:

APPENDIX B: EXAMPLE OF A RECREATION ANALYSIS PROGRAM (RAP) "SITE SPECIFIC DATA REPORT"

The information in a "Site Specific Data Report" is the same as that contained in an "Area Report," but summarized by individual campsite. Definitions and abbreviations are the same as for Appendix A.

SITE SPECIFIC DATA REPORT

Mark Color Color	ITE NO.	THUIGHT										
11.	•	OCC UP 1ED	OT NI LEC U		7 0 N	5 0	TENT (PCT)	POP-U3 (PCT)	PICK-UP (PCI)	TRAVEL TRAILER (PCT)	MOTORHOME (PCT)	NONE (PCT)
18	i	43	0	١ ~	4.3	182	38.1	33, 3		14.3		7.7
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	0003	3.9	C	21	2.7	110	63.2	15.8	10,5	c	o	

APPENDIX C: RECREATION AREA AND PROJECT DATA SUMMARIES FOR THE 1982 CAMPGROUND RECEIPT STUDY

This appendix contains the accumulated data for each recreation area and project within the Campground Receipt Study (CRS). There are two tables for each of the fifteen projects (Tables C1-C30): the first contains general user characteristics and the second indicates the presence of vehicle or equipment type (the percentages from the total number of groups that had one or more of the specified types are shown. All missing observations were deleted from these calculations). It should be noted that the sum of recreation area total for "recreation days," "number of camping permits," and "number of camping groups" may not equal the project totals. This is a result of missing or miscoded recreation area codes that make it possible to include the data in the project totals only.

Table C1

Lake Barkley User Characteristics

Characteristic	Canal	Hurricane Creek	Devils Elbow	Project Totals
Recreation days	22,533	25,634	1,935	50,102
Mean length of stay, days	3.40	2.28	2.05	2.69
Mean number in group	2.77	2.95	3.20	2.90
Percent prior visits	82.2	84.9	21.3	81.1
Percent primary destination	90.8	96.8	52.8	92.6
Percent golden passports	34.2	21.1	3.1	25.9
Number of camping permits	3,419	4,136	382	7,937
Number of camping groups	2,416	3,824	286	6,526

Table C2

Lake Barkley Vehicle and Equipment Type

Vehicle/Equipment	Canal	Hurricane Creek	Devils Elbow	Project Totals
Car	37.1	28.6	44.8	32.0
Truck.	57.2	52.0	35.7	52.1
Van	8.4	7.1	13.3	7.7
Other	1.0	0.9	7.3	1.2
Tent	8.2	23.4	68.2	19.7
Pop-up	7.8	8.5	5.6	8.1
Pickup	10.6	22.6	7.0	17.3
Travel trailer	52.3	27.5	2.8	35.8
Motorhome	19.9	20.1	2.4	19.2
Power boat	30.8	52.2	33.2	43.4
Sailboat	0.2	0.1	0.0	0.2
Bicycle	11.7	3.7	0.7	6.5
Motorcycle	2.5	0.1	0.7	1.0
ORV*	3.5	0.0	0.0	1.3

^{*} Off-road vehicle.

Table C3

Lake Benbrook User Characteristics

Characteristic	South Holiday	Mustang	Project Totals
Recreation days	15,307	14,558	29,865
Mean length of			
stay, days	2.70	1.68	2.15
Mean number in			
group	3.20	3.76	3.51
Percent prior			
visits	88.5	80.8	84.3
Percent primary			
destination	91.4	96.0	93.9
Percent golden			
passports	30.1	9.1	19.1
Number of camping			
permits	2,601	2,871	5,472
Number of camping			
groups	2,003	2,360	4,363

Table C4

Lake Benbrook Vehicle and Equipment Type

	South		Project
Vehicle/Equipment	Holiday	Mustang	Totals
Car	46.0	48.8	47.5
Truck	50.9	46.2	48.3
Van	8.7	13.2	11.1
Other	2.8	4.0	3.5
Tent	23.7	40.5	32.7
Pop-up	6.0	5.3	5.6
Pickup	14.9	14.3	14.5
Travel trailer	39.1	16.5	27.0
Motorhome	14.8	9.1	11.8
Power boat	12.9	18.2	15.8
Sailboat	0.1	0.6	0.4
Bicycle	2.4	1.1	1.7
Motorcycle	1.5	1.3	1.4
ORV	0.1	0.1	0.1

Table C5 Greers Ferry Lake User Characteristics

Characteristic	Dam Site	01d Hwy 25	Heber Springs	Cove	Shiloh	Narrows	Devils Fork	Sugar Loaf	Van Buren	Choctaw	J.F.K.	Project Totals
Recreation days	56,545	15,084	16,922	6,001	8,337	16,873	9,073	14,715	2,552	20,541	28,612	195,364
Mean length of stay, days	2.01	1.98	2.05	1.92	2.21	3.20	2.05	2.55	2.07	. 2.53	3.35	2.37
Mean number in group	3.67	4.17	3.58	3.98	3.74	3.00	3.69	3.54	3.60	3.42	2.89	3.53
Percent prior visits	83.1	80.4	81.1	78.9	83.0	70.4	73.2	64.3	42.0	87.2	67.0	1.11
Percent primary destination	92.8	86.3	81.0	9.6	89.8	87.2	83.6	87.1	59.2	92.6	86.0	88.3
Percent golden passports	10.6	2.7	3.2	8.9	5.1	37.0	8.3	18.0	7.5	27.2	44.7	18.4
Number of camping permits	787'6	2,296	2,775	954	1,339	2,771	1,536	2,269	717	3,621	6,579	32,054
Number of camping groups	7,435	1,778	2,236	862	1,009	1,845	1,177	1,673	343	2,486	2,820	23,600

Table C6 Greers Ferry Lake Vehicle and Equipment Type

Vehicle/ Equipment	Dam Site	01d Hwy 25	Heber Springs	Cove	Shiloh	Narrows	Devils Fork	Sugar	Van Buren	Choctaw	J.F.K.	Project Totals
Car	52.0	45.1	6.74	41.6	43.6	24.7	39.8	38.1	57.5	30.0	29.3	41.8
Truck	37.2	47.2	41.0	49.1	78.4	46.7	50.9	42.8	32.9	9.87	48.2	43.5
Van	8.8	8.1	10.2	14.9	7.8	10.0	11.0	12.7	15.0	10.6	10.0	6.6
Other	3.6	4.1	2.4	3.0	1.2	5.9	1.2	2.0	0.3	8.0	2.1	2.9
Tent	59.6	67.8	8.89	71.3	6.49	17.3	9.89	47.4	63.0	33.8	27.5	51.5
dn-dod	6.6	10.8	13.2	9.1	11.6	10.0	11.6	15.0	7.6	7.8	14.1	11.0
Pickup	7.6	9.8	6.1	8.3	8.5	7.1	7.8	7.0	18.4	12.4	8.0	6.8
Travel trailer	13.9	7.6	7.5	10.5	12.4	42.6	7.8	17.5	9.8	32.9	32.4	19.0
Motorhome	7.6	2.8	2.9	1.8	3.7	22.0	5.6	11.1	3.2	14.2	15.7	9.2
Power boat	6.6	24.0	22.8	28.8	17.6	26.2	42.9	25.6	16.3	14.8	3.9	17.1
Sailboat	0.3	0.3	8.0	7.0	1.4	0.1	0.3	7.0	9.0	0.1	0.1	0.3
Bicycle	3.0	2.0	1.8	1.0	8.4	7.7	3.2	7.1	0.0	1.7	2.9	3.0
Motorcycle	1.6	0.8	1.5	1.0	1.4	1.4	0.7	1.3	2.6	7.0	1.1	1.2
ORV	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.1

Table C7 Hartwell Lake User Characteristics

Characteristic	Watsadlers	River	Crescent	Spring- field	Tran- sient Group	Glen Ferry Park	Milltown	Chan- dlers Ferry*	Paynes Creek	Asbury	Oconee Point	Twin Lakes	Cone- ross Park*	Project Totals
Recreation days	15,675	145	6,026	9,280	877	155	5,518	324	3,821	7,235	17,950	14,371	290	81,709
Mean length of stay, days	3.97	1.46	3.96	3.84	2.00	1.72	3.12	2.05	2.86	3.42	3.74	3.54	2.38	3.59
Mean number in group	3.29	4.25	4.33	3.93	6.47	5.21	3.67	4.24	3.68	3.79	4.08	3.84	4.55	3.83
Percent prior visits	9.6	50.0	93.3	90.5	58.8	31.6	85.7	43.2	50.0	82.1	61.6	82.7	44.2	76.4
Percent primary destination	92.0	70.8	95.7	97.3	61.8	100.0	9.68	51.4	48.1	88.0	70.8	97.1	71.2	85.4
Percent golden passports	1.44.1	0.0	23.4	10.6	2.9	0.0	11.6	0.0	1.3	16.6	10.4	18.0	0.0	19.5
Number of camping permits	2,211	28	697	1,250	35	26	785	39	009	1,007	2,082	1,869	89	10,714
Number of camping groups	1,189	77	329	602	34	19	097	37	376	525	1,114	986	52	5,759

^{*} Campgrounds used during peak use periods only.

Table C8
Hartwell Lake Vehicle and Equipment Type

						Glen								
Vehicle/Equipment	Watsadlers	River	Crescent	Spring- field	Transient Group	Ferry Park	Milltown	Chandlers Ferry	Paynes Creek	Asbury	Oconee Point	Twin Lakes	Coneross Park	Project Totals
Car	55.1	50.0	7.09	67.5	33.3	68.4	45.0	59.5	47.7	57.1	57.7	58.3	47.1	56.5
Truck	50.7	0.04	43.4	40.1	70.0	42.1	52.1	37.8	6.67	42.1	53.5	43.9	52.9	8.74
Van	12.8	25.0	11.4	8.5	3.3	15.8	8.5	13.5	15.4	9.7	10.8	12.6	8.6	11.4
Other	3.6	0.0	1.6	3.3	0.0	0.0	2.6	0.0	0.3	9.0	2.4	2.4	0.0	2.3
Tent	23.2	77.3	54.1	57.0	64.5	76.5	45.3	75.0	66.1	60.5	44.5	50.6	74.5	46.7
Pop-up	16.1	4.5	17.5	19.5	6.5	0.0	17.4	11.1	16.2	10.8	19.1	16.3	7.8	16.5
Pickup	7.9	9.1	5.7	4.7	12.9	17.6	16.7	9.6	4.5	10.5	13.0	13.6	7.8	10.2
Travel trailer	36.2	0.0	14.3	15.7	22.6	0.0	15.6	0.0	9.0	11.4	20.2	14.9	3.9	19.5
Motorhome	14.8	1.6	8.6	3.0	6.7	0.0	10.2	2.8	5.4	9.7	3.9	4.6	2.0	7.4
Power boat	25.8	0.0	24.3	41.7	32.4	31.6	0.74	43.2	53.7	4.74	52.3	9.97	51.9	41.9
Sailboat	0.3	0.0	6.0	1.5	0.0	0.0	5.2	0.0	0.0	0.2	0.2	8.0	0.0	6.0
Bicycle	8.7	4.2	7.6	8.9	5.9	10.5	8.3	0.0	4.3	1.3	10.0	8.5	7.7	7.5
Motorcycle	8.0	0.0	0.3	0.7	0.0	0.0	0.2	0.0	0.3	1.0	6.0	2.3	0.0	6.0
ORV	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1

Table C9

McNary Lock and Dam User Characteristics

Characteristic	Hood Park
Recreation days	20,352
Mean length of stay, days	1.85
Mean number in group	2.94
Percent prior visits	48.6
Percent primary destination	54.6
Percent golden passports	35.0
Number of camping permits	4,729
Number of camping groups	3,695

Table C10
NcNary Lock and Dam Vehicle and Equipment Type

Vehicle/	
Equipment	Hood Park
Car	27.2
Truçk	40.9
Van	10.0
Other	1.6
Tent	18.6
Pop-up	3.1
Pickup	18.6
Travel trailer	35.2
Motorhome	25.2
Power boat	4.4
Sailboat	0.1
Bicycle	2.8
Motorcycle	1.3
ORV	0.0

Table C11

<u>Milford Lake User Characteristics</u>

Characteristi	Curtis Creek	Farnum Creek	Rolling Hills	School Creek	Timber Creek	Project Totals
Recreation days	7,782	7,281	6,481	3,404	5,189	30,454
Mean length of stay, days	2.19	1.78	2.28	1.83	1.77	2.00
Mean number in group	3.60	5.69	3.40	3.43	3.55	3.89
Percent prior visits	76.0	93.7	56.1	91.1	78.7	77.5
Percent primary destination	92.9	95.3	59.8	98.5	87.8	85.9
Percent golden passports	12.6	7.7	19.9	10.9	8.0	9.8
Number of camping permits	1,295	793	1,058	694	1,012	4,856
Number of camping groups	1,008	684	834	540	859	3,928

Table C12
Milford Lake Vehicle and Equipment Type

Vehicle/Equipment	Curtis Creek	Farnum Creek	Rolling Hills	School Creek	Timber Creek	Project Totals
Car	32.6	45.8	38.6	26.1	33.1	34.9
Truck	55.8	45.6	38.7	57.3	56.6	51.2
Van	9.1	8.2	10.4	12.2	8.6	9.5
Other	1.2	0.8	0.5	1.9	1.8	1.3
Tent	22.1	41.8	25.2	43.3	37.5	32.2
Pop-up	5.5	5.4	6.9	4.7	12.2	7.2
Pickup	16.8	18.0	14.6	20.4	18.9	17.5
Travel trailer	33.9	28.4	25.1	19.8	30.2	28.3
Motorhome	22.0	7.7	27.0	16.9	7.5	16.9
Power boat	50.6	18.9	36.6	43.5	20.1	34.4
Sailboat	1.2	0.3	1.4	2.0	0.2	1.0
Bicycle	1.1	0.0	1.3	0.9	0.0	0.7
Motorcycle	3.2	0.4	1.4	5.9	0.6	2.1
ORV	0.1	0.1	1.0	0.4	0.0	0.3

Table C13

New Hogan Lake User Characteristics

Characteristic	Acorn
Recreation days	52,269
Mean length of stay, days	2.85
Mean number in group	3.10
Percent prior visits	75.6
Percent primary destination	84.4
Percent golden passports	22.5
Number of camping permits	7,456
Number of camping groups	5.921

Table C14

New Hogan Lake Vehicle and Equipment Type

Vehicle/Equipment	Acorn
Car	25.9
Truck	48.7
Van	12.8
Other	0.5
Tent	32.1
Pop-up	2.8
Pickup	21.7
Travel trailer	24.6
Motorhome	19.8
Power boat	23.2
Sailboat	0.3
Bicycle	0.4
Motorcycle	1.0
ORV	0.1

Table C15
Nolin River Lake User Characteristics

Characteristic	Wax	Moutardier	-	
Recreation days	4,465	18,924	2:	
Mean length of stay, days	1.92	3.59		
Mean number in group	3.57	3.64		
Percent prior visits	61.4	67.7		
Percent primary destination	92.6	65.9		
Percent golden passports	8.9	5.3		
Number of camping permits	832	2,407	3	
Number of camping groups	666	1,512	2	

Table C16
Nolin River Lake Vehicle and Equipment Type

Vehicle/Equipment	<u>Wax</u>	Moutardier	Project Totals
Car	45.8	49.4	48.3
Truck	39.8	35.4	36.8
Van	15.5	17.3	16.7
Other	0.9	1.0	1.0
Tent	64.6	58.9	60.7
Pop-up	5.9	7.6	7.1
Pickup	24.2	22.6	23.0
Travel trailer	4.7	7.8	6.9
Motorhome	7.0	5.6	6.0
Power boat	47.4	47.0	47.2
Sailboat	0.8	0.3	0.4
Bicycle	0.0	0.1	0.1
Motorcycle	0.0	0.1	0.1
ORV	0.0	0.0	0.0

Table C17

<u>Lake Oahe User Characteristics</u>

Characteristic	Downstream South	Downstream North	Indian Creek	Indian Memorial	Project Totals
Recreation days	3,097	22,392	9,469	7,645	42,603
Mean length of stay, days	1.60	2.46	2.92	2.87	2.52
Mean number in group	3.56	3.32	3.36	3.27	3.34
Percent prior visits	51.9	47.0	55.1	54.1	50.2
Percent primary destination	56.0	33.1	82.9	84.8	53.1
Percent golden passports	15.0	23.8	25.6	31.4	24.6
Number of camping permits	701	4,191	1,401	1,200	7,493
Number of camping groups	555	2,859	980	833	5,227

Table C18

Lake Oahe Vehicle and Equipment Type

Vehicle/Equipmemt	Downstream South	Downstream North	Indian Creek	Indian Memorial	Project Totals
Car	39.7	26.3	23.1	22.2	26.4
Truck	40.5	43.2	45.4	49.7	44.4
Van	7.9	10.9	9.2	12.9	10.6
Other	4.6	2.3	4.8	4.9	3.5
Tent	45.0	24.3	19.5	18.8	24.6
Pop-up	9.2	10.7	6.9	5.1	8.9
Pickup	21.3	19.9	27.3	27.7	22.7
Travel trailer	14.3	22.2	22.7	23.9	21.7
Motorhome	16.2	25.8	28.2	31.3	26.1
Power boat	19.3	32.1	61.1	68.3	42.0
Sailboat	0.5	0.1	1.0	0.0	0.3
Bicycle	3.4	6.1	2.8	3.1	4.7
Motorcycle	1.8	2.3	0.7	1.9	1.9
ORV	0.2	0.5	0.3	0.0	0.4

Table C19 R. S. Kerr Lock and Dam User Characteristics

		Short			,	
Characteristic	Applegate Cove	Mountain	Cowlington	Gore	Sallisaw Creek	Project Totals
Recreation days	6,602	1,926	766,4	1,814	1,093	16,514
Mean length of stay, days	2.89	1.94	2.55	2.29	1.62	2.49
Mean number in group	3.46	4.11	7.00	3.27	7.98	3.78
Percent prior visits	9.79	74.8	78.4	78.3	56.2	72.1
Percent primary destination	77.3	89.4	89.0	87.7	71.5	83.2
Percent golden passports	44.1	34.0	34.5	46.5	9.5	38.0
Number of camping permits	096	353	765	340	169	2,603
Number of camping groups	269	254	509	244	130	1,845

Table C20

R. S. Kerr Lock and Dam Vehicle and Equipment Type

Vehicle/ Equipment	Apple- gate Cove	Short Mountain Cove	Cowlington Point	Gore Landing	Sallisaw Creek	Project Totals
Car	30.7	43.9	31.3	21.1	42.6	32.3
Truck	66.9	69.6	74.8	72.3	64.3	70.0
Van	6.7	7.5	5.0	9.9	6.2	6.7
Other	1.6	2.4	1.2	0.0	1.6	1.4
Tent	14.5	47.6	24.0	27.7	37.8	25.1
Pop-up	3.0	1.2	5.5	6.8	8.4	4.3
Pickup	19.3	19.5	23.8	37.0	31.1	23.7
Travel trailer	49.3	32.1	49.2	23.0	16.8	41.0
Motorhome	20.6	8.9	8.1	15.3	11.8	14.2
Power boat	36.7	42.9	41.1	68.0	53.1	44.0
Sailboat	0.7	0.8	0.2	0.0	0.0	0.4
Bicycle	2.4	1.6	1.6	1.2	0.0	1.7
Motorcycle	1.1	0.0	0.4	0.0	2.3	0.7
ORV	0.0	0.0	0.4	0.0	0.0	0.1

Table C21
Lake Ouachita User Characteristics

Characteristic	Denby Point	Tompkins Bend	Joplin	Crystal Springs	Brady Mountain	Project Totals
Recreation days	8,914	21,525	16,841	14,522	24,981	87,978
Mean length of stay, days	2.79	3.75	2.94	2.58	2.88	2.96
Mean number in group	3.84	3.95	4.01	3.75	4.02	3.88
Percent prior visits	48.2	63.5	65.7	62.6	53.5	58.5
Percent primary destination	49.7	34.4	62.8	76.4	54.0	56.4
Percent golden passports	18.1	15.0	7.4	6.5	6.6	10.6
Number of camping permits	1,127	1,602	1,678	1,942	2,767	9,259
Number of camping groups	857	1,188	1,302	1,485	2,110	7,044

Table C22

<u>Lake Ouachita Vehicle</u> and Equipment Type

Vehicle/ Equipment	Denby Point	Tompkins Bend	Joplin	Crystal Springs	Brady Mountain	Project Totals
Car	46.0	40.2	50.7	52.1	48.0	47.8
Trụck	43.4	49.2	44.1	45.0	39.8	43.7
Van	12.3	12.1	9.8	11.9	10.8	11.3
Other	4.8	1.3	2.2	3.2	2.2	2.6
Tent	55.1	45.9	66.6	65.3	64.4	60.8
Pop-up	13.0	14.2	9.9	12.3	10.8	11.7
Pickup	18.4	12.5	11.4	13.5	10.5	12.6
Travel trailer	20.0	24.7	12.3	9.3	13.8	15.1
Motorhome	7.1	10.6	6.1	4.9	6.5	6.8
Power boat	42.0	50.0	47.4	40.1	41.6	43.7
Sailboat	1.1	0.2	1.6	0.5	2.4	1.3
Bicycle	2.9	5.2	2.2	3.0	4.7	3.7
Motorcycle	0.8	0.7	0.9	1.4	1.8	1.2
ORV	0.0	0.1	0.1	0.6	0.0	0.2

Table C23 Lake Shelbyville User Characteristics

Characteristic	Coon	Lone	Lithia Springs	Forrest W. Bo Wood	Whitley	Project Totals
Recreation days	61,551	6,405	606,67	31,188	11,421	160,545
Mean length of stay, days	2.93	2.07	2.90	3.23	2.37	2.90
Mean number in group	3.56	4.38	3.57	3.01	3.82	3.51
Percent prior visits	68.6	65.8	54.0	75.6	66.5	65.3
Percent primary destination	91.5	65.2	76.3	91.4	92.7	85.9
Percent golden passports	10.7	1.9	13.3	27.8	6.4	14.3
Number of camping permits	7,751	147	6,170	4,241	1,575	20,496
Number of camping groups	5,901	029	4,772	3,231	1,226	15,809

Table C24

Lake Shelbyville Vehicle and Equipment Type

Vehicle/ Equipment	Coon Creek	Lone Point	Lithia Springs	Forrest W. Bo Wood	Whitley Creek	Project Totals
Car	43.8	46.7	48.1	35.4	52.7	44.3
Truck	35.6	36.7	29.4	43.5	36.6	35.4
Van	13.2	14.2	13.2	12.2	15.2	13.2
Other	4.0	5.7	1.8	3.7	1.4	3.1
Tent	42.4	69.3	39.9	17.3	68.0	39.7
Pop-up	10.8	7.7	14.5	7.5	12.1	11.2
Pickup	13.0	11.1	11.2	11.6	9.9	11.8
Travel trailer	25.6	8.0	19.0	42.6	9.7	25.0
Motorhome	11.7	4.2	15.4	20.6	3.9	13.7
Power boat	38.0	40.3	26.3	35.4	50.5	35.0
Sailboat	0.2	0.4	0.4	0.2	1.3	0.3
Bicycle	10.3	5.4	3.7	10.6	6.0	7.8
Motorcycle	1.3	1.6	0.9	1.4	1.1	1.2
ORV	0.1	0.3	0.1	0.1	0.1	0.1

Table C25

Shenango River Lake User Characteristics

Characteristic	Shenango Rec. Area
Recreation days	69,764
Mean length of stay, days	3.71
Mean number in group	3.96
Percent prior visits	80.3
Percent primary destination	95.6
Percent golden passports	11.7
Number of camping permits	7,241
Number of camping groups	4,459

Table C26
Shenango River Lake Vehicle and Equipment Type

Vehicle/	Shenango
Equipment	Rec. Area
Car	56.5
Truck	39.2
Van	11.7
Other	4.9
Tent	36.7
Pop-up	13.7
Pickup	11.0
Travel trailer	25.7
Motorhome	10.0
Power boat	35.0
Sailboat	0.4
Bicycle	42.2
Motorcycle	0.7
ORV	0.1

Table C27
Somerville Lake User Characteristics

Characteristic	Big Creek	Rocky Creek	Yegna Creek	Overlook Park	Project Totals
Recreation days	9,169	49,229	38,472	14,859	112,080
Mean length of stay	1.78	1.97	2.48	1.25	1.98
Mean number in group	3.60	4.11	3.75	4.70	4.05
Percent prior visits	62.4	73.0	84.6	36.0	69.3
Percent primary destination	84.8	50.8	93.6	35.1	64.4
Percent golden passports	5.6	16.6	26.9	4.8	16.9
Number of camping permits	1,621	7,222	5,313	2,669	16,874
Number camping groups	1,469	6,768	4,671	2,582	15,532

Table C28
Somerville Lake Vehicle and Equipment Type

Vehicle/Equipment	Big Creek	Rocky Creek	Yegna Creek	Overlook Park	Project Totals
Car	49.9	40.6	42.5	58.5	45.1
Truck	44.4	51.2	50.5	39.7	48.3
Van	9.0	10.6	9.1	10.0	9.9
Other	1.9	0.7	0.7	0.9	0.9
Tent	65.4	49.7	32.0	47.6	45.1
Pop-up	7.4	9.9	7.5	3.7	8.0
Pickup	4.9	10.0	6.1	7.9	8.0
Travel trailer	7.6	21.2	33.5	5.2	21.8
Motorhome	4.9	7.7	14.8	6.1	9.5
Power boat	25.3	31.2	37.7	27.3	32.0
Sailboat	2.3	1.6	1.9	2.7	2.0
Bicycle	1.8	0.7	2.9	0.2	1.4
Motorcycle	0.4	0.4	1.3	0.6	0.7
ORV	0.0	0.3	0.1	0.1	0.1

Table C29 West Point Lake User Characteristics

Characteristic	R. Shaefer Heard	Brush Creek	Holiday Park	State Line	Amity Park	Project Totals
Recreation days	14,338	564	30,089	7,758	18,563	71,830
Mean length of stay, days	2.32	2.07	2.42	2.17	2.89	2.48
Mean number in group	3.20	3.89	3.77	3.61	3.27	3.50
Percent prior visits	42.7	9.62	89.5	79.8	80.4	75.6
Percent primary destination	7.97	6.46	9.96	7.76	79.5	81.3
Percent golden passports	35.9	8.2	20.7	7.6	33.6	25.8
Number of camping permits	2,006	86	3,667	1,039	2,304	6,149
Number of camping groups	1,920	86	3,469	995	2,138	8,655

Table C30
West Point Lake Vehicle and Equipment Type

Vehicle/ Equipment	R. Shaefer <u>Heard</u>	Brush Creek	Holiday Park	State <u>Line</u>	Amity Park	Project Totals
Car	49.5	47.7	33.7	43.3	45.1	40.5
Truck	39.8	59.1	43.5	48.2	45.8	42.9
Van	9.3	9.1	15.7	11.3	10.7	12.0
Other	0.4	0.0	0.4	0.1	0.6	0.4
Tent	30.3	44.0	33.8	45.2	24.8	32.3
Pop-up	7.6	16.5	6.5	9.0	9.7	8.0
Pickup	11.1	22.0	18.6	9.2	12.0	14.2
Travel trailer	33.5	15.4	22.3	21.4	34.1	27.5
Motorhome	19.4	7.7	24.5	19.1	23.7	22.3
Power boat	24.0	54.1	55.4	48.3	38.0	43.3
Sailboat	0.1	1.0	0.3	0.3	0.7	0.3
Bicycle	3.0	8.2	2.6	0.4	4.3	2.8
Motorcycle	0.5	6.1	0.7	0.8	1.1	0.8
ORV	0.0	1.0	0.4	0.1	0.1	0.2